

**AMENDMENT UNDER 37 C.F.R. § 1.116**  
**U.S. Application No. 10/631,810**

**Docket No. Q76527**

**REMARKS**

The Office Action of May 23, 2005 has been received and its contents carefully considered.

Claims 1-8 are all the claims pending in the application.

The Examiner recommends that applicants cancel the non-elected subject matter in response to the present Office Action.

The Examiner states that Group I is drawn to a tetracyclic ring, where  $Z_2$  forms a thiophene or furan and fused to a benzo ring.

The Examiner points out that claim 1 as amended is drawn to Group I and to Group III, since it recites "condensed ring to form a tetracyclic ring system". The Examiner states that a Group I condensed ring of a tetracyclic system can be formed when a benzo ring is fused to  $Z_2$ , and a Group III tetracyclic ring system can be formed when a heterocyclic ring is fused to  $Z_2$ .

The Examiner states that applicants have to delete the non-elected subject matter from claim 1. The Examiner refers to formula I-5, I-6, I-29 or I-30 on pages 33 and 35 as examples. These compounds belong to Group I.

The Examiner suggests that applicants amend claim 1 to recite the phrase -- $Z_2$  represents an atomic group selected from the group consisting of a furan ring and a thiophene ring which are condensed to a benzo ring to form a tetracyclic ring--.

In response, applicants submit that claim 1 can be considered to be a linking claim. If the Examiner finds one of the elected species in claim 1 to be allowable, then he should examine another species. Therefore, applicants submit that it is not necessary for applicants to amend claim 1 at the present time.

**AMENDMENT UNDER 37 C.F.R. § 1.116**  
**U.S. Application No. 10/631,810**

**Docket No. Q76527**

Further, the Examiner states that applicants have to delete the non-elected subject matter from claim 3. The Examiner states that the variables  $V_2$  and  $V_3$  should form a benzo ring. The Examiner states when  $V_2$  and  $V_3$  are defined as a substituent, they do not form as a tetracyclic ring according to Group I.

With respect to claim 3 and the Examiner's comment that when  $V_2$  and  $V_3$  are defined as a substituent they do not form a tetracyclic ring, applicants disagree with the Examiner's interpretation of the meaning of claim 3. Claim 3 recites that  $V_2$  and  $V_3$  each represents a substituent "and"  $V_2$  and  $V_3$  form a condensed ring containing  $V_2$  and  $V_3$ . Accordingly, applicants submit that the correct interpretation of the meaning of claim 3 is that  $V_2$  and  $V_3$  must combine to form a tetracyclic ring.

Applicants note that in the Response to the Restriction Requirement filed on September 21, 2004, applicants elected Compound III-51, set forth at page 52 of the specification, as a single disclosed species.

In now reviewing Compound III-51, applicants realize that since  $Z_1$  in Compound III-51 represents oxygen,  $Z_1$  does not represent an atomic group necessary to form a thiazole. Accordingly, the election of Compound III-51 was in error since Compound III-VI does not include a thiazole. Applicants hereby elect Compound III-29, disclosed at page 50 of the specification.

Claims 1-8 have been rejected under the second paragraph under 35 U.S.C. § 112 as indefinite.

The Examiner sets forth three reasons for this rejection.

Applicants discuss each of the Examiner's reasons for the rejection below.

**AMENDMENT UNDER 37 C.F.R. § 1.116**  
**U.S. Application No. 10/631,810**

**Docket No. Q76527**

(a) The Examiner states that in claim 1 the phrase "which has a condensed ring to form a tetracyclic ring system" is indefinite.

The Examiner asks what is covered and what is not? The Examiner asks what is the nature of the ring that is fused to the thiophene or furan ring?

The Examiner points out that as a result of the restriction requirement, Group I is drawn to a tetracyclic ring system where the "benzo ring" is fused to furan or thiophene.

The Examiner again suggests that applicants amend claim 1 to read as follows: --Z<sub>2</sub> represents an atomic group selected from the group consisting of a furan ring and a thiophene ring which are condensed to a benzo ring to form a tetracyclic ring--.

In response, applicants submit that the fact that claim 1 is broad does not mean that claim 1 is indefinite. The Examiner does not point out why he does not understand the meaning of claim 1. Thus, claim 1 does not restrict the nature of the ring that is fused to the thiophene or furan ring. Applicants submit that there is nothing indefinite in having a claim which does not define the nature of the ring that is fused to the thiophene or the furan ring.

(b) The Examiner states that in claim 3 and elsewhere in the claim, the phrases "V<sub>1</sub> represents a substituent" is indefinite.

The Examiner asks what substituent? The Examiner asks what substituents are covered and what are not?

The Examiner states that applicants have to recite the substituents whenever they use the term "substituent" in the claims.

The Examiner recommends that the applicants recite specific substituents from pages 19-21 of the specification.

**AMENDMENT UNDER 37 C.F.R. § 1.116**  
**U.S. Application No. 10/631,810**

**Docket No. Q76527**

In response, applicants have amended claims 1 and 3 to recite specific substituents as described at pages 19 to 21 of the specification.

(c) The Examiner states that in claims 5, 6 and 8, the phrase "dissociable group" is not clear. The Examiner asks what are covered and what are not?

The Examiner notes that "applicants recite at least one dissociable group that are contained in the substituent substituted on the heterocyclic group represented by  $Z_2$  (i.e., a sulfo group or a carboxyl group), but applicants don't recite other dissociable groups that applicants intend to claim".

Applicants understand the Examiner's statement that "applicants recite at least one dissociable group" to mean that the specification discloses only a sulfo group or a carboxyl group as a dissociable group.

Applicants point out that the specification at page 24 states that the "dissociable group used herein may be any group so long as it has a dissociable proton and has negative charge at proton dissociation". Page 24 then gives as examples a sulfo group, a carboxyl group, a phosphonic acid group and a hydroxyl group. The specification further states that preferred groups are a sulfo group and a carboxyl group. The specification states that such a dissociable group may not have a proton and form a salt with a counter ion in the form of an anion.

Thus, contrary to the Examiner's statement that the specification only discloses sulfo or carboxyl, the specification contains other examples, namely, a phosphonic acid group and a hydroxyl group.

Accordingly, applicants have amended claims 5, 6, and 8 to recite the specific dissociable groups disclosed at page 24 of the specification.

**AMENDMENT UNDER 37 C.F.R. § 1.116**  
**U.S. Application No. 10/631,810**

**Docket No. Q76527**

In view of the above, applicants request withdrawal of this rejection

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain an issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

*Sheldon I. Landsman*

Sheldon I. Landsman  
Registration No. 25,430

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: November 23, 2005

**CERTIFICATION OF FACSIMILE TRANSMISSION**

Sir:

I hereby certify that the above identified correspondence is being facsimile transmitted to Examiner Kahsay Habte at the Patent and Trademark Office on November 23, 2005 at (571) 273-8300.

Respectfully submitted,

*Sheldon I. Landsman*  
Sheldon I. Landsman  
Registration No. 25,430